## WHAT IS CLAIMED IS:

1. An amphiphilic compound having a dendritic branch structure having general formula (I):

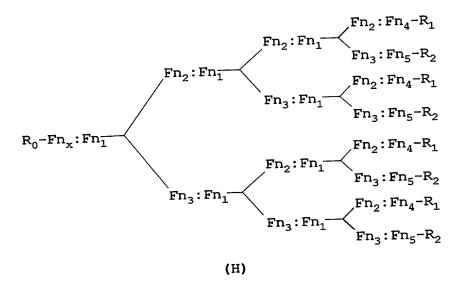
$$R_0 \xrightarrow{R_1} R_2 \qquad (I)$$

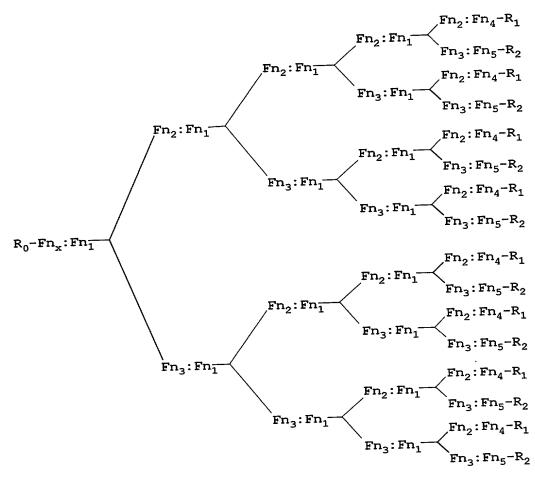
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which is selected from the group consisting of an amphiphilic compound having a dendritic branch structure represented by the following formula (G), an amphiphilic compound having a dendritic branch structure represented by the following formula (H), and an amphiphilic compound having a dendritic branch structure represented by the following formula (J):

 $Fn_{2}:Fn_{4}-R_{1}$   $Fn_{3}:Fn_{5}-R_{2}$   $Fn_{3}:Fn_{4}-R_{1}$   $Fn_{5}-R_{2}$   $Fn_{5}-R_{2}$   $Fn_{5}-R_{2}$   $Fn_{5}-R_{2}$   $Fn_{5}-R_{2}$   $Fn_{5}-R_{2}$ 





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where  $Fn_X$ ,  $Fn_1$ ,  $Fn_2$ ,  $Fn_3$ ,  $Fn_4$  and  $Fn_5$  respectively represents a functional reactive group, each of which is bonded to a neighboring functional reactive group;  $R_0$  is a hydrophilic group;  $R_1$  and  $R_2$  are independently a hydrophobic group; and n is an integer of 2 to 4.

- The amphiphilic compound according to claim 1, wherein said functional reactive group is bonded through amide bond or ester bond.
- 3. The amphiphilic compound according to claim 1, wherein said  $R_0$  is poly- or oligo-oxyethylene derivative, poly- or oligo-saccharide derivative, or poly- or oligo-peptide.
  - 4. The amphiphilic compound according to claim 2, wherein said  $R_0$  is poly- or oligo-oxyethylene derivative, poly- or oligo-saccharide derivative, or poly- or oligo-peptide.
  - 5. An amphiphilic compound having a dendritic branch structure having general formula (II):

$$R_{0} = \begin{bmatrix} O & N & O & \\ -C & -CH & -C & -R_{1} & \\ X - N & -C & -R_{2} & (II) \end{bmatrix}$$

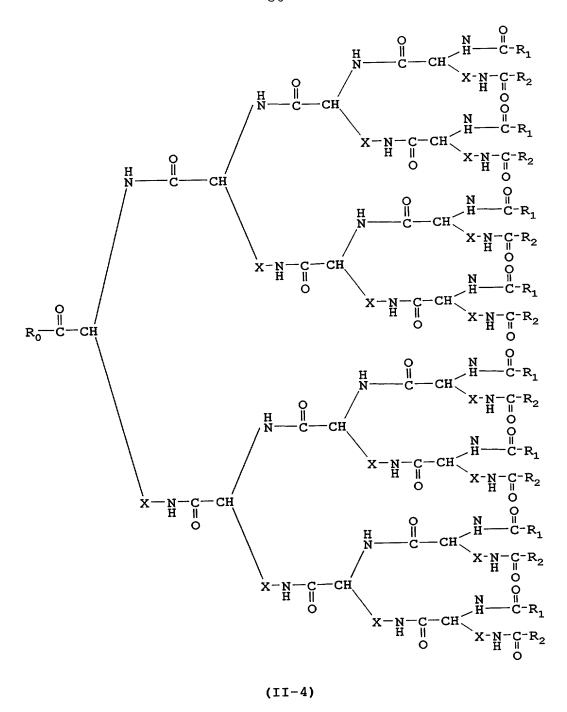
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which is selected from the group consisting of an amphiphilic compound having a dendritic branch structure represented by the following formula (II-1), an amphiphilic compound having a dendritic branch structure represented by the following formula (II-2), an amphiphilic compound having a dendritic branch

structure represented by the following formula (II-3), and an amphiphilic compound having a dendritic branch structure represented by the following formula (II-4):

$$\begin{array}{c} O \\ R_0 - C - CH < N - C - R_1 \\ X - N - C - R_2 \\ O \end{array}$$
 (II-1)



where  $R_0$  is a hydrophilic group; X is  $-(CH_2)_4$ -or  $-(CH_2)_p$ -CO- (wherein p is 1 or 2);  $R_1$  and  $R_2$  are independently a hydrophobic group; and n is an integer of 1 to 4.

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- 6. The amphiphilic compound according to claim 5, wherein said compound is represented by said formula (II-2), said formula (II-3) or said formula (II-4).
- 7. The amphiphilic compound according to claim 5, wherein each of said  $R_1$  and  $R_2$  is independently an alkyl group.
- 8. The amphiphilic compound according to claim 7, wherein said alkyl group contains 1 to 30 carbon atoms.
- 9. The amphiphilic compound according to claim 6, wherein each of said  $R_1$  and  $R_2$  is independently an alkyl group.
- 10. The amphiphilic compound according to claim 9, wherein said alkyl group contains 1 to 30 carbon atoms.
- 11. The amphiphilic compound according to claim 5, wherein said  $R_0$  is poly- or oligo-oxyethylene derivative, poly- or oligo-saccharide derivative, or poly- or oligo-peptide.
  - 12. The amphiphilic compound according to claim 6, wherein said  $R_0$  is poly- or oligo-oxyethylene derivative, poly- or oligo-saccharide derivative, or poly- or oligo-peptide.
- 13. The amphiphilic compound according to claim 5, wherein said  $R_0$  is represented by a formula:  $R-(OCH_2CH_2)_mCH_2NH- \text{ or } R-(OCH_2CH_2)_mOCH_2C(O)NHCH_2CH_2NH- \text{ where R is H-, CH}_3-, CH_3C(O)-, HOOCCH}_2-, H_2NCH_2CH_2NHC(O)CH_2-, \text{ or poly- or oligo-peptides; and m is an integer of 1 to 3000.}$

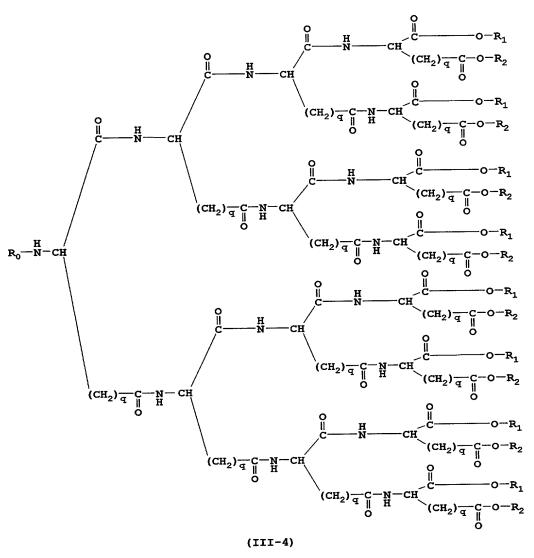
- 14. The amphiphilic compound according to claim 6, wherein said  $R_0$  is represented by a formula:  $R-(OCH_2CH_2)_mCH_2NH- \text{ or } R-(OCH_2CH_2)_mOCH_2C(O)NHCH_2CH_2NH- \text{ where R is H-, CH}_3-, CH_3C(O)-, HOOCCH}_2-, H_2NCH_2CH_2NHC(O)CH_2- \text{ or poly- or oligo-peptides; and m is an integer of 1 to 3000.}$
- 15. An amphiphilic compound having a dendritic branch structure having following general formula (III):

$$R_0 = \begin{bmatrix} H & O & \\ H & C & C \\ \hline C & C & C \\ \hline (CH_2)_q & C & O - R_2 \\ \hline O & 0 \\ \end{bmatrix}_n$$
 (III)

which is selected from the group consisting of an amphiphilic compound having a dendritic branch structure represented by the following formula (III-1), an amphiphilic compound having a dendritic branch structure represented by the following formula (III-2), an amphiphilic compound having a dendritic branch structure represented by the following formula (III-3), and an amphiphilic compound having a dendritic branch structure represented by the following formula (III-4):

$$R_0 = N - CH < CH_2 = C - C - CH_2$$
(CH<sub>2</sub>) = C - C - C - C (III-1)

(III-3)



where  $R_0$  is a hydrophilic group;  $R_1$  and  $R_2$  are independently a hydrophobic group; n is an integer of 1 to 4 and q is 1 or 2.

- 16. The amphiphilic compound according to claim 15, wherein said compound is represented by said formula (III-2), said formula (III-3) or said formula (III-4).
- 17. The amphiphilic compound according to claim 15, wherein each of said  $R_1$  and  $R_2$  is independently an alkyl group.

- 18. The amphiphilic compound according to claim 17, wherein said alkyl group contains 1 to 30 carbon atoms.
- 19. The amphiphilic compound according to claim 16, wherein each of said  $R_1$  and  $R_2$  is independently an alkyl group.
  - 20. The amphiphilic compound according to claim 19, wherein said alkyl group contains 1 to 30 carbon atoms.
- 10 21. The amphiphilic compound according to claim 15, wherein said  $R_0$  is poly- or oligo-oxyethylene derivative, poly- or oligo-saccharide derivative, or poly- or oligo-peptide.
- 22. The amphiphilic compound according to

  15 claim 16, wherein said R<sub>0</sub> is poly- or oligo-oxyethylene derivative, poly- or oligo-saccharide derivative, or poly- or oligo-peptide.
- 23. The amphiphilic compound according to claim 15, wherein said  $R_0$  is represented by a formula:  $R-(OCH_2CH_2)_mCH_2NH- \text{ or } R-(OCH_2CH_2)_mOCH_2C(O)NHCH_2CH_2NH- \text{ (wherein R is H-, CH}_3-, CH_3C(O)-, HOOCCH}_2-, H_2NCH_2CH_2NHC(O)CH_2- \text{ or poly- or oligo-peptides; and m is an integer of 1 to 3000.}$
- 24. The amphiphilic compound according to claim 16, wherein said  $R_0$  is represented by a formula:  $R-(OCH_2CH_2)_mCH_2NH- \text{ or } R-(OCH_2CH_2)_mOCH_2C(O)NHCH_2CH_2NH-$  wherein R is H-, CH<sub>3</sub>-, CH<sub>3</sub>C(O)-, HOOCCH<sub>2</sub>-,

 ${\rm H_2NCH_2CH_2NHC}$  (O)  ${\rm CH_2-}$  or poly- or oligo-peptides; and m is an integer of 1 to 3000.